

CLAIM AMENDMENTS

1. (Previously Presented) A method of cleaning a semiconductor material surface of a partially manufactured integrated circuit, wherein the semiconductor material surface contains dopant ions, the method comprising:

coating the semiconductor material surface containing the dopant ions with a non-aqueous organic solvent selected from the group consisting of methyl ethyl ketone, cyclohexanone, methyl isoamyl ketone, 2-heptanone, polyhydric alcohols, cyclic ethers and esters, and mixtures thereof, wherein coating the semiconductor material surface is subsequent to implantation of dopant ions into the surface; and

removing the solvent and the dopant ions from the semiconductor material surface.

2. (Canceled)

3. (Original) The method according to Claim 1, further comprising rinsing the partially manufactured integrated circuit with deionized water.

4. (Canceled)

5. (Canceled)

6. (Original) The method according to Claim 1, wherein the dopant ions are selected from the group consisting of arsenic, gallium, indium, phosphorous, boron, antimony and bismuth ions.

7. (Previously Presented) The method according to Claim 1, further comprising heating the semiconductor material surface and removing an increased amount of dopant ions relative to not heating the semiconductor material surface.

8. (Canceled)

9. (Canceled)

10. (Previously Presented) The method according to Claim 1, wherein coating the semiconductor material surface occurs prior to formation of a barrier layer on the semiconductor material surface.